



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,649	07/13/2001	Stefan Gierl	Westphal.6321	2679

7590 02/09/2006
PATRICK J O'SHEA
O'SHEA GETZ & KOSAKOWSKI
1500 MAIN STREET
SUITE 912
SPRINGFIELD, MA 01115

EXAMINER

NGUYEN, QUYNH H

ART UNIT	PAPER NUMBER
----------	--------------

2642

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/905,649

Applicant(s)

GIERL, STEFAN

Examiner

Quynh H. Nguyen

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 11/21/05 has been entered. Claims 1-14 have been amended. No claims have been cancelled. No claims have been added. Claims 1-14 are still pending in this application, with claims 1 and 6 being independent.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1, 6-10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Rudolph et al. (U.S. Patent 6,188,447).

Regarding claim 1, Rudolph et al. teach the method for operating a radio/television reception system that includes a plurality of receivers (Fig. 1, receivers 2 and 5) assigned to a common output device (Fig. 1), in which one of the receivers is always designated as an audio receiver (receiver 2; col. 3, lines 35-36), and another of the receivers is designated as a search receiver (receiver 5), said method comprising:

stepping the search receiver through its frequency band for a frequency signal value associated with the same transmitter and determining a measure of the signal strength of said frequency signal value (col. 3, lines 46-57; col. 4, lines 11-14);

Art Unit: 2642

comparing the signal strength of the signal received by the search receiver and the signal strength of the signal received by the audio receiver (col. 3, lines 55-61; col. 4, lines 14-18);

tuning the audio receiver to said frequency signal value if the measure of the signal strength of said frequency signal value is better than the measure of the signal strength associated with the current signal received by the audio receiver (col. 3, lines 61-62); and

repeating said steps of stepping, comparing and tuning (col. 3, line 67 – *where Rudolph discussed continues searching, hence the steps of comparing and tuning will follow the searching step once better signal strength found*).

Regarding claim 6, Rudolph et al. teach the steps of:

a first receiver (Fig. 1, receiver 2) that is tuned to receive a signal from a certain transmitter and provide a received signal indicative thereof and a first quality signal indicative of signal strength of the received signal (col. 3, lines 35-36 and lines 38-45);

a second receiver (Fig. 1, receiver 5) that is automatically scanned through its associated reception range to identify a frequency signal value associated with the transmitter (col. 3, lines 46-59 and col. 4, lines 11-14);

wherein the first receiver compares the first quality signal and the second quality signal and tunes to the frequency signal value if the second quality signal indicates a better signal quality (col. 3, line 61 - *superior quality*) than the first quality signal (col. 3, lines 59-67). Rudolph's frequency diversity system is inherently usable in a vehicle.

Art Unit: 2642

Regarding claim 7, Rudolph et al. teach a bus to which the first and second receivers are connected and over which the first and second receivers communicate (hybrid circuit 18).

Regarding claims 8-10, Rudolph et al. teach an audio processing unit (Fig. 1, 8) couple the first receiver to receive the receiver signal and provide an output signal indicative thereof, a controller and an a microprocessor (Fig. 1, 3).

Regarding claim 12, Rudolph et al. teach the second receiver receives an identification signal over the bus indicative of the transmitter (col. 3, lines 50-59).

Claim Rejections - 35 USC § 103

4. Claims 2-5, 11, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudolph et al. (U.S. Patent 6,188,447) in view of Taromaru et al. (U.S. Patent 5,548,836).

Regarding claim 2, Rudolph does not teach computing the difference between the field strengths, providing a difference signal value indicative thereof, and comparing the difference signal value to a threshold value.

Taromaru et al. teach computing the difference between the field strengths, providing a difference signal value indicative thereof, and comparing the difference signal value to a threshold value (col. 2, lines 12-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Taromaru into the teachings of

Art Unit: 2642

Rudolph for the purpose of the antennas are switched when the instantaneous value of the receiving electric field intensity decreases below the threshold value.

Regarding claim 3, Rudolph et al. teach the threshold value is a fixed threshold value (col. 3, lines 57-62).

Regarding claim 4, Taromaru et al. teach the threshold value is a set relative to the quality of a frequency found by the search receiver (col. 2, lines 12-22).

Regarding claim 5, Rudolph et al. teach transmitting the frequency found by the search receiver to the audio receiver, and tuning the audio receiver to this frequency (col. 3, lines 59-62).

Regarding claim 11, Rudolph et al. do not teach the first and second receivers each include their own uniquely associated antenna.

Taromaru et al. teach the first receiver 30 and second receiver 40 each include their own uniquely associated antennas 10 and 20.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Taromaru into the teachings of Rudolph for the purpose of the antenna receiving radio wave for the receiver, as taught by Taromaru (col. 2, lines 43-48).

Regarding claim 13, Rudolph et al. do not teach the bus comprises a MOST bus. There are different types of bus, but all serve the same purpose of communicating between receivers.

Regarding claim 14, Rudolph et al. teach the first receiver transmits the identification signal onto the comparator 50. Obviously, the first receiver transmits the identification signal onto the bus if the comparison takes place there.

Response to Arguments

5. Applicant's arguments filed 11/21/05 have been fully considered but they are not persuasive.

Applicant argues that "FIG. 1 discloses a television receiver - not an audio receiver as recited in claim 1" (Remarks, page 5). Examiner respectfully disagrees. Rudolph teaches the receivers are for audio (col. 3, lines 35-36; col. 4, lines 19-21).

Applicant argues that nowhere in Rudolph discloses the provision of a quality signal (Remarks, page 6). Examiner respectfully disagrees. Rudolph does teach (col. 2, lines 2-4 – where Rudolph discussed frequency of higher quality and lines 9-12 – where Rudolph discussed the highest quality signal and col. 3, lines 60-61 – where Rudolph discussed the reception quality of reference transmitter 5 is of superior quality) that the provision of a quality signal.

Applicant argues that Rudolph does not disclose the first receiver compares the first and second quality signals (Remarks, page 7). Examiner respectfully disagrees. Rudolph teaches the first and second quality signals are compared and tuned to the superior quality signal (col. 3, lines 59-63; col. 4, lines 25-28).

Conclusion

Art Unit: 2642

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 571-272-7489. The examiner can normally be reached on Monday - Thursday from 6:15 A.M. to 4:45 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

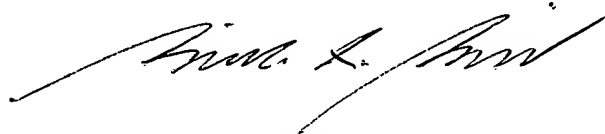
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2642

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quynh H. Nguyen

January 26, 2006

A handwritten signature in black ink, appearing to read "Bing Q. Bui", written in a cursive style.

BING Q. BUI
PRIMARY EXAMINER